

Requêtes SQL – DATAImmo

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Requête 1 : Nombre total d'appartements vendus au 1^{er} semestre 2020

The screenshot shows a MySQL Workbench interface with multiple tabs at the top labeled 'requete1' through 'requete7'. The 'requete1' tab is active. Below the tabs is a toolbar with various icons for file operations and database management. A dropdown menu 'Limit to 10000 rows' is open. The main area contains a numbered SQL query:

```
1 •  SELECT count(*) as Nb_Appartements_Vendus_premierSemestre2020
2   FROM projetbdd.vente v , projetbdd.bien b
3   WHERE v.Date < '2020-07-01' and v.Date >= '2020-01-01'
4   and v.Bien_idBien = b.idBien
5   and b.TypeLocal = 'Appartement' ;
```

Below the query is a results grid with two columns: 'Nb_Appartements_Vendus_premierSemestre2020' and its value '31377'.

Requête 2 : Le nombre de ventes d'appartement par région pour le 1^{er} semestre 2020

The screenshot shows a MySQL Workbench interface with multiple tabs at the top labeled 'requete1' through 'requete10'. The 'requete2' tab is active. Below the tabs is a toolbar with various icons. A dropdown menu 'Limit to 10000 rows' is open. The main area contains a numbered SQL query:

```
1 •  SELECT d.CodReg , d.NomReg , count(*) as Nb_vente_Appartement
2   FROM projetbdd.vente v , projetbdd.bien b , projetbdd.commune c , projetbdd.departement d
3   WHERE v.Date < '2020-07-01' and v.Date >= '2020-01-01'
4   and v.Bien_idBien = b.idBien
5   and b.Commune_idComDepCodCom = c.idComDepCodCom
6   and c.Departement_CodDep = d.CodDep
7   and b.TypeLocal = 'Appartement'
8   group by d.CodReg , d.NomReg ;
```

Below the query is a results grid with three columns: 'CodReg', 'NomReg', and 'Nb_vente_Appartement'. The data is as follows:

CodReg	NomReg	Nb_vente_Appartement
84	Auvergne-Rhône-Alpes	3252
32	Hauts-de-France	1254
93	Provence-Alpes-Côte d'Azur	3615
44	Grand Est	1024
76	Occitanie	1683
28	Normandie	859
75	Nouvelle-Aquitaine	1932
24	Centre-Val de Loire	696
27	Bourgogne-Franche-Comté	376
53	Bretagne	982
94	Corse	223
52	Pays de la Loire	1356
11	Île-de-France	13951
1	Gaule-Piémont	2
2	Martinique	94
3	Guyane	34
4	La Réunion	44

Requête 3 : Proportion des ventes d'appartements par le nombre de pièces

The screenshot shows the MySQL Workbench interface with the 'requete3' tab selected. The SQL query is:

```
1 • Select b.TotalPiece, round(count(*)*100/sum(count(*)) over(), 2) as proportionVenteApp
2   from vente v, bien b
3   where v.idVente = b.idBien
4   and b.TypeLocal = 'Appartement'
5   group by b.TotalPiece
6   order by b.TotalPiece
```

The result grid displays the following data:

TotalPiece	proportionVenteApp
0	0.10
1	21.48
2	31.18
3	28.57
4	14.21
5	3.55
6	0.65
7	0.17
8	0.05
9	0.03
10	0.01
11	0.00

Requête 4 : Liste des 10 départements où le prix du mètre carré est le plus élevé

The screenshot shows the MySQL Workbench interface with the 'requete4' tab selected. The SQL query is:

```
1 • SELECT d.CodDep, d.NomDep, avg(v.Valeur/b.SurfaceCarrez) AS pmCarre
2   from vente v, bien b, commune c, departement d
3   where v.idVente=b.idBien and b.Communne_idComDepCodCom=c.idComDepCodCom and c.Departement_CodDep = d.CodDep
4   group by d.CodDep,d.NomDep
5   order by pmCarre desc limit 10
```

The result grid displays the following data:

CodDep	NomDep	pmCarre
75	Paris (75)	12045.419721649227
92	Hauts-de-Seine (92)	7280.886249133082
94	Val-de-Marne (94)	5340.505838121836
6	Alpes-Maritimes (06)	4682.724766203927
74	Haute-Savoie (74)	4667.12666457594
93	Seine-Saint-Denis (93)	4336.699786073923
78	Yvelines (78)	4225.253635857256
9	Ariège (09)	4078.1147120483265
69	Rhône (69)	4065.971943635748
2A	Corse-du-Sud (2A)	4010.602850990234

Requête 5 : Prix moyen du mètre carré d'une maison en île-de-France

The screenshot shows the MySQL Workbench interface with the following details:

Query Editor:

```
1 • SELECT d.CodReg, d.NomReg, avg(v.Valeur/b.SurfaceCarrez) as pmCarre_maison
2   from vente v, bien b , commune c, departement d
3   where v.idVente=b.idBien and b.Communne_idComDepCodCom=c.idComDepCodCom and c.Departement_CodDep = d.CodDep
4   and b.TypeLocal = 'Maison'
5   and d.CodReg = 11
6   group by d.CodReg, d.NomReg;
```

Result Grid:

CodReg	NomReg	pmCarre_maison
11	Île-de-France	3737.3218328385346

Requête 6 : Liste des 10 appartements les plus chers avec la région et le nombre de mètres carrés

The screenshot shows the MySQL Workbench interface with the following details:

Query Editor:

```
1 • SELECT b.idBien, d.NomReg, v.Valeur, b.SurfaceCarrez
2   FROM bien b, vente v, commune c, departement d
3   WHERE v.idVente=b.idBien and b.Communne_idComDepCodCom=c.idComDepCodCom and c.Departement_CodDep = d.CodDep
4   and b.TypeLocal = 'Appartement'
5   group by b.idBien, d.NomReg, b.SurfaceCarrez
6   order by v.Valeur DESC limit 10;
```

Result Grid:

idBien	NomReg	Valeur	SurfaceCarrez
32275	Île-de-France	9000000	9.1
21835	Île-de-France	8600000	64
29799	Île-de-France	8577713	20.55
32433	Île-de-France	7620000	42.77
29850	Île-de-France	7600000	253.3
29522	Île-de-France	7535000	139.9
31973	Île-de-France	7420000	360.95
32135	Île-de-France	7200000	595
29353	Île-de-France	7050000	122.56
29513	Île-de-France	6600000	79.38

Requête 7 : Taux d'évolution du nombre de ventes entre le premier et le second trimestre de 2020

Requête 8 : Le classement des régions par rapport au prix au mètre carré des appartements de plus de 4 pièces

The screenshot shows the MySQL Workbench interface. The top menu bar has tabs for 'script', 'requete1', 'requete2', 'requete3', 'requete4', 'requete5', 'requete6', 'requete 7', 'requete 8' (which is currently selected), 'requete9', and 'requete10'. Below the menu is a toolbar with various icons for database management. The main area displays a SQL query:

```
1 •   SELECT d.CodReg, d.NomReg, round(avg(v.Valeur/b.SurfaceCarrez),2) AS prix
2   from vente v, bien b , commune c, departement d
3   where v.idVente=b.idBien and b.Commune_idComDepCodCom=c.idComDepCodCom and c.Departement_CodDep = d.CodDep
4   and b.TotalPiece > 4 and b.TypeLocal = 'Appartement'
5   group by d.CodReg, d.NomReg
6   order by prix DESC ;
```

Below the query is a 'Result Grid' table with three columns: 'CodReg', 'NomReg', and 'prix'. The data is as follows:

	CodReg	NomReg	prix
▶	11	Île-de-France	8776.37
4		La Réunion	3641.81
93		Provence-Alpes-Côte d'Azur	3613.27
94		Corse	3104.88
84		Auvergne-Rhône-Alpes	2891.38
75		Nouvelle-Aquitaine	2465.48
53		Bretagne	2412.05
52		Pays de la Loire	2315.76
32		Hauts-de-France	2189.93
76		Occitanie	2108.03
28		Normandie	2015.77
44		Grand Est	1581.65
24		Centre-Val de Loire	1453.11
27		Bourgogne-Franche-Comté	1251.19
2		Martinique	573.48

Requête 9 : Liste des communes ayant eu au moins 50 ventes au 1^{er} trimestre

script requete1 requete2 requete3 requete4 requete5 requete6 requete 7 requete 8 requete9 ×

Limit to 10000 rows |

```
1 •  SELECT c.idComDepCodCom, c.NomCom, count(v.idVente) AS nbVente
2   FROM vente v, bien b, commune c
3   where v.idVente=b.idBien and b.Communne_idComDepCodCom=c.idComDepCodCom
4   and v.Date between '2020-01-01' and '2020-03-31'
5   group by c.idComDepCodCom, c.NomCom
6   having nbVente >= 50
7   order by nbVente desc ;
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

	idComDepCodCom	NomCom	nbVente
▶	75117	PARIS 17	228
	75115	PARIS 15	215
	75118	PARIS 18	209
	688	NICE	173
	75111	PARIS 11	169
	75116	PARIS 16	165
	3363	BORDEAUX	157
	75114	PARIS 14	146
	75120	PARIS 20	127
	44109	NANTES	119
	75119	PARIS 19	116
	75112	PARIS 12	110
	75110	PARIS 10	109
	75109	PARIS 09	106
	38185	GRENOBLE	106
	9212	BOULOGN...	99
	75113	PARIS 13	94
	75107	PARIS 07	87
	75106	PARIS 06	86
	13208	MARSEILL...	81
	924	ASNIERES...	81
	9226	COURBEV...	80
	75105	PARIS 05	79
	75103	PARIS 03	79
	31555	TOULOUSE	78
	64	ANTIBES	77
	13204	MARSEILL...	72
	13201	MARSEILL...	71
	9480	VINCENNES	68
	9263	RUEIL-MA...	68
	59350	LILLE	67
	13209	MARSEILL...	66
	9348	MONTREUIL	65
	497	ANGERS	64
	30189	NIMES	63
	1328	LA CIOTAT	62
	75108	PARIS 08	62
	34301	SETE	62
	35238	RENNES	61
	75102	PARIS 02	61
	75104	PARIS 04	60
	83137	TOULON	59
	9244	LEVALLOI...	59
	9468	SAINT-MA...	56
	2A4	AJACCIO	54
	78646	VERSAILLES	54
	9262	PUTEAUX	53
	9240	ISSY-LES...	50

Requête 10 : Différence en pourcentage du prix au mètre carré entre un appartement de 2 pièces et un appartement de 3 pièces

```

script requete1 requete2 requete3 requete4 requete5 requete6 requete 7 requete 8 requete9 requete10 x requete11
1 • with
2   table1 as(
3     select round(avg(v.Valeur/b.SurfaceCarrez),2) as f2
4     from vente v, bien b
5     where b.idBien = v.idVente
6     and b.TotalPiece = 2 and b.TypeLocal ='Appartement'
7   ),
8   table2 as(
9     select round(avg(v.Valeur/b.SurfaceCarrez),2) as f3
10    from vente v , bien b
11    where b.idBien = v.idVente
12    and b.TotalPiece = 3 and b.TypeLocal ='Appartement'
13  )
14
15   select round(((f3/f2)-1)*100,2) as 'difference'
16   from table1, table2;
  
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: □

	difference
▶	-12.31

Requête 11 : Les moyennes de valeurs foncières pour le top 3 des communes des départements 6,13,33,59,69

```

script requete1 requete2 requete3 requete4 requete5 requete6 requete7 requete8 requete9 requete10 requete11 x
1 • select *
2   from (
3     select c.NomCom, c.Departement_CodDep, round(avg(v.Valeur),2) as moyenneVF,
4     rank() over(partition by c.Departement_CodDep order by avg(v.Valeur) desc) as Rang
5     from commune c, vente v, bien b
6     where v.idVente=b.idBien and b.Communne_idComDepCodCom=c.idComDepCodCom
7     and c.Departement_CodDep in ('6','13','33','59','69')
8     group by c.NomCom, c.Departement_CodDep
9   ) as table1
10  where rang<=3;
  
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: □

NomCom	Departement_CodDep	moyenneVF	Rang
GIGNAC-LA-NERTHE	13	330000	1
SAINT SAVOURNIN	13	314425	2
CASSIS	13	313416.88	3
LEGE-CAP-FERRET	33	549500.64	1
VAYRES	33	335000	2
ARCACHON	33	307435.93	3
BERSEE	59	433202	1
CYSOING	59	408550	2
HALLUIN	59	322250	3
SAINT-JEAN-CAP-FERRAT	6	968750	1
EZE	6	655000	2
MOUANS-SARTOUX	6	476898.09	3
VILLE SUR JARNIOUX	69	485300	1
LYON 2EME	69	455217.27	2
LYON 6EME	69	426968.25	3